was not interested in conducting the removal action. Under a settlement agreement, Allied agreed to reimburse the EPA and their contractors for the costs of the cleanup activities, up to $7.5 million.

The portion of the former Bryant Mill Pond that was remediated included the area north of Alcott Street Dam; east and west to the embankments of the Portage Creek floodplain (under 790' elevation), and extending upstream to a point east of the southeast corner of the Bryant Historical Residual Dewatering Lagoon (Bryant HRDL).

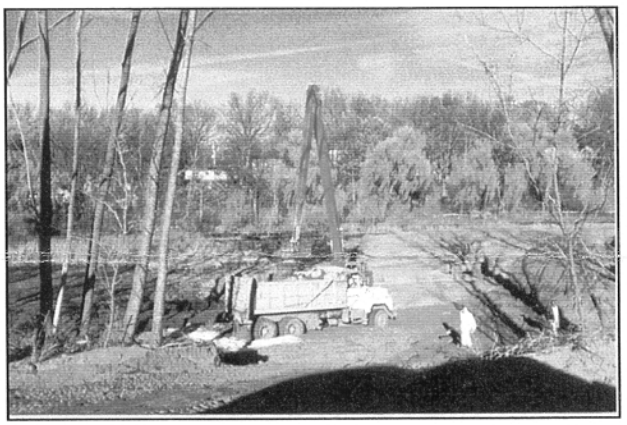

Figure 2: Removal of PCB contaminated floodplain soils.

The EPA and their contractors, U.S. Army Corps of Engineers, Roy F. Weston, and Bailey Construction initially proposed to remove approximately 90,000 cubic yards of PCB-contaminated sediments from the creekbed and floodplain areas. However, due to the presence of more PCB-contaminated material than was originally estimated, approximately 150,000 cubic yards of material was excavated. Remediation activities began in June 1998 with the initial clearing of vegetation surrounding the site to allow for heavy equipment access. Portage Creek was temporarily diverted from its normal streambed in order to conduct "dry" excavation of the creek bed and floodplain soils. Excavation began in October 1998 and was completed in May 1999. Excavated material was placed in the HRDL and the Bryant Former Residual Dewatering Lagoons (FRDLs).

Figure 3: The Bryant Lagoons are on higher ground and protected from Portage Creek flows by a stabilized dike.

The remediation cleanup level set by the EPA for this removal action was 10 ppm, with a goal of 1 ppm. The MDEQ recommended PCB cleanup goal for Allied Paper OU 1 was 0.33 ppm. Remediation proved to be very effective as PCB concentrations were dramatically reduced, with levels remaining in the sediments ranging from non-detect to 0.46 ppm. Approximately 92 percent of the verification samples analyzed were under 1 ppm. An estimated 21,000 pounds (10 tons) of PCBs were removed from the streambed and the floodplain soils. Additionally, approximately 7.5 million gallons of contaminated water were treated at the site through the on-site carbon filtration system, and discharged to the city of Kalamazoo wastewater treatment facility.

The original cost estimate regarding the time-critical removal cleanup action assumed approximately 90,000 cubic yards of contaminated material would be removed was $7.5 million. To date, this budget has not significantly increased even though the excavation of additional PCB-contaminated material and associated activities were necessary.